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Effect of the Use of ICT and Media Based Learning Ability of Learning Outcomes of Interpersonal Communication Entrepreneurship

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Abstract

The purpose of this study was to determine; whether there are differences in learning outcomes of students group taught using interactive learning media online with offline media interactive learning; whether there are differences in the group of students who have the ability to communicate openly interpersonal acquire entrepreneurial learning outcomes with interpersonal closed; and whether there is an interaction between the use of interactive learning media and interpersonal communication in influencing entrepreneurial learning outcomes. The study population was a student of mechanical engineering education which took entrepreneurship courses numbered 150 people with a random sample (cluster random sampling). Quasi-experimental research methods, with a 2×2 factorial design and data analysis techniques to test the hypothesis by analysis of variance (ANOVA) and two lines (two-way ANOVA) at significance level $\alpha = 0.05$. Furthermore further test with Fisher's exact test and test Bartlett.

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The results showed that; use an online interactive learning media influence on entrepreneurial learning outcomes higher when compared with offline interactive; entrepreneurial learning outcomes of students who have higher interpersonal communication open than closed interpersonal communication; and there is an interaction between the use of interactive learning media and interpersonal communication in influencing student learning outcomes entrepreneurship.

Keywords: ICT-based instructional media; interpersonal communication skills; entrepreneurship.

1. Introduction

Entrepreneurship education in Indonesia is still lacking adequate attention, either by education or society. Many educators are paying less attention to the growth of entrepreneurial attitudes and behavior of the target learners, both in schools both secondary and higher education levels, as well as in professional education. Their orientation, in general only in preparing the workforce.

According to data from the Directorate General of Youth and School Education Department of National Education of Indonesia 75.3 million young people, 6.6 percent of the graduate. Of these 82% of its work in the public and private sectors, while only 18% of own or become entrepreneurs. Though more and more university graduates who become entrepreneurs will be able to speed up economic recovery. Entrepreneurship (effect on the economic progress of the nation), such as Singapore, Malaysia and China into countries that rapid economic growth due to applying the principles of entrepreneurship. Recognizing the lack of natural resources, the government and the business world relies heavily on the ability to create and innovate in producing quality products and services.

In general, university graduates be more prepared than the job seekers into job creators. While the interest of university graduates for entrepreneurship is still very low. This condition can be used as a reference for reflection and universities to encourage implement a program that focuses on the development of entrepreneurship culture in order to complete the intellectual culture of the master of science and technology-based entrepreneurship. Talking about the problem of education is inseparable from learning problems. This is because learning has a very important role in the educational process. Improving the quality of education shows on improving the quality of learning processes and outcomes. If teaching and learning can take place effectively, then, the educational system can be said to be qualified, the more effective it can be concluded that the learning process, the better the learning outcomes of students.

Entrepreneurship course is competency insight work behavior, which is expected, the student: (1) is able to use the methodology of science in Mechanical Engineering Production to verify and establish understanding and gain practical skills in entrepreneurship, (2) is able to present yourself as a professional lecturer in learning techniques Production machines, (3) be able to develop competencies to work according to their interests, abilities and skills to achieve the minimum admission requirements and included in the economic system and have the academic foundation for entry into higher education, (4) able to develop competence to be applied in the field of economic or practices of economic functions.

Basically, improving the quality of education is the duty of all those involved in education. One of the efforts in improving the quality of education in accordance with the development of science and technology as well as the era of globalization is the use of interactive learning media based on technological advances and communicates information (ICT). This allows learning activities can be carried out effectively and efficiently so that the intended purpose can be achieved with either. For that each lecturer is required in order to keep improving its quality both in knowledge and creativity in designing interactive learning media used in delivering course materials entrepreneurship so that results can be achieved optimal learning.

In connection with the use of interactive learning media, then that is a concern to every lecturer is how a teacher is able to select and use and customize the material, the nature and characteristics of science as well as the characteristics of the students. The use of media in learning aims to assist students in mastering course materials and skills. In this case the lecturer should really be able to design the learning process and determine the materials to be delivered and what the media presented on entrepreneurship courses.

Student learning outcomes at the course Entrepreneurship is not maximized and satisfying, it is apparently due to the lack of support the learning process of understanding the students that learning may be less attractive, perhaps too monotonous or maybe less variable that can cause a decline in learning outcomes.

Many factors must be examined in improving student learning outcomes, particularly those associated with entrepreneurship courses. Some things that can be found is a lot of students who felt that the course Entrepreneurship is a subject that is difficult to understand the concept. Limitations of the faculty in designing and managing and applying it to the learning process interesting, causing students are not motivated to learn Entrepreneurship. One effort that can be done to improve student learning outcomes is to improve the quality of learning by using interactive learning media.

Along with the development, the use of ICT, especially the Internet for education in Indonesia continues to grow. Educational development towards e-learning is a necessity that the quality standards of education can be improved, because e-learning is the use of Internet technology in the delivery of learning in a wide range which is based on three criteria, namely: (1) e-learning is a network with the ability to renew, store , distribute and share teaching materials or information, (2) delivery to end users through a computer using a standard internet technology, (3) focus on the most expansive view of learning beyond the traditional learning paradigms, thus the urgency of information technology can be optimized for education [1].

In connection with the foregoing, a lecturer is required to be able to provide learning activities by utilizing / using the internet. Utilization is intended to eliminate or reduce the tedium saturation of each student in participating in learning activities with the intention that each student is more vibrant, creative, diligent, enthusiastic, critical and participate in any activities conducted on each of the learning process.

According Arikunto [2], that the teacher is expected to be able to create high quality learning process so as to produce the achievement of students. The main task of a teacher is to help students in learning. There are three functions that can be played lecturer in learning, namely: (1) as an instructional designer, (2) the management of

learning, and (3) learning evaluator. As a designer or planner of learning, a teacher should be able to design learning in order to be able to run effectively and efficiently, to the lecturers are required to have sufficient knowledge of the principles of learning as a basis for designing learning activities by selecting instructional media, set goals, choose materials, choose a method/approach and evaluate learning activities. As a lecturer teaching managers must be able to manage the whole process of learning activities by creating conditions conducive to a dynamic learning and, thus professors demanded continuously monitors the learning outcomes have been achieved students and always try to improve.

In addition to the lack of use of appropriate media interactive learning, the low acquisition Entrepreneurship student learning outcomes are also influenced by the characteristics of the students themselves that interpersonal communication, it can be seen from the lack of student interaction during the learning process. Students are less active asks, just accept what is presented by the lecturer. Not active in the search for additional materials either through books or through the internet.

Looking at the above, it is necessary improvements continuous learning process, so that students are more motivated, more active and also have interpersonal communication in studying Entrepreneurship courses, so as to improve learning outcomes. One effort that can be done is by the use of interactive learning media, so as to encourage the students easier to understand the concepts of entrepreneurship learning.

Through E-Learning Moodle (Modular Object Oriented Dynamic Learning Environment) which is one of the Learning Management System (LMS) is expected to improve the efficiency of teaching and learning, increasing motivation, facilitate active learning, facilitating experimental study, consistent with student-centered learning, guide to learn better, and learn with their own and with its own adjustable speed increase understanding of the content.

In addition to the use of interactive learning media, lecturers should also be able to pay attention to interpersonal communication owned by the student. Success depends on how student learning can deliver learning abilities will be the analysis of the Enterprise, which in turn will create the students have the ability to communicate. Therefore, the use of interactive learning media need to be assessed, whether entrepreneurship can improve learning outcomes optimally.

The term self-employment and self-employment is often used simultaneously, although basically have somewhat different substances. About entrepreneurship, Norman M. Scarborough and Thomas W. Zimmerer [3] argued that the entrepreneur is "An entrepreneur is one WHO creates a new business in the face of risk and uncertainty for the purpose of Achieving profit and growth by identifying opportunities and assembling the Necessary resources to capitalize on Reviews those opportunities ".

Entrepreneurship is the process of innovation and creation Kuratko [4]; Hisrich& Peters [5]. People who are called entrepreneurs entrepreneurship. Entrepreneurs are innovators and creators. Entrepreneur is an innovator [6].

Entrepreneurship is the attitude, spirit, and the ability to create something new that is very valuable and useful to themselves and others. Entrepreneurship is a mental attitude and spirit that is always active, creative, power, creativity, initiative and understated in the attempt in order to increase revenue in its business activities or their work. Someone who has an entrepreneurial spirit and attitude always not satisfied with what has been achieved. From time to time, day to day, week to week is always looking for opportunities to improve business and life. He always create and innovate without stopping, because with all the opportunities to create and innovate can be obtained. Skilled entrepreneurs are people who take advantage of opportunities to expand its business with the aim to improve their lives.

Hisrich & Peters in Alma [7], stating that the entrepreneur is the process of creating something different with value by devoting The Necessary time and effort, assuming the Accompanying financial, psychological, and social risk and receiving the resulting rewards of the monetary and personal satisfaction. With simple language can be said that the entrepreneur or self-employment is the process of creating something different to devote all his time and energy accompanied by a bear financial risk, psychological, social, and receive remuneration in the form of money and personal satisfaction.

Entrepreneurship is the process of creating something new and dare to take the risk and benefit. Experts agree that the definition of entrepreneurship involves three behaviors, namely: creative, committed (high motivation and full responsibility), and risk-taking and failure.

A change in behavior as a result of learning is often referred to as a result of learning. Arikunto [8] states that a person may be a result of learning the knowledge, skills and attitudes. Someone who has studied will experience a change in him in the form of knowledge, skills and attitudes. Hamid [9] suggests that learning outcomes are all effects that can be used as an indicator of the value of the use of a method under different conditions. This effect can be intentionally designed effect, therefore it is the desired effect and can also be a real effect as a result of the use of certain teaching methods.

In connection with some of the above opinion, the learning outcome of Entrepreneurship is a process of change in behavior that occurs inside learners because of the efforts of students to learn. Behavioral changes include increased knowledge of learners, the change of attitude of learners and learners skills change to get maximum learning outcomes Entrepreneurship. And to achieve maximum results, then a lecturer is required in performing the learning should be based on the characteristics of the course in accordance with the applicable curriculum.

Suparman [11] stated that the media is a tool that is used to deliver messages or information from the sender to the receiver. The sender and the recipient can take the form of people or institutions, while the media may be electronic tools, pictures, books and so on.

Winkel [12] states that instructional media as a means of non-personal (non-human) that is used or provided by teachers to achieve instructional goals. Instructional media has experienced rapid growth, in addition to books lectures, photocopying, workbooks, encyclopedias, dictionaries, magazines and newspapers are also audiovisual media is the result of the development of the field of electronics and mechanics technology.

Gagne stated that instructional media are different types of components in the environment that can stimulate learners to learn. Briggs stated that the learning media is a means to provide incentives for the learners so that learning occurs [13].

Heinich, Molenda and Russell [14] states that the learning media can be used to deliver learning materials for all ages. It shows that the learning media can be used and suitable to present learning materials to students to achieve the learning objectives.

Definition of related interactive two-way communication, or more of the components of communication. Component communication in interactive media (computer-based) is the relationship between human beings (as a user/users of the product) and computer (software/applications/products in a particular file format, usually in the form of a CD). Thus the product/CD/applications that are expected to have a two-way relationship/reciprocity between software/application with the user.

In accordance with the restrictions described above problem that the focus in this study is about the properties of organic compounds and functional groups on the basis of macromolecular compounds as the material taught in entrepreneurial learning, and learning about the media used in this study interactive learning media online and offline .

According to Dabbagh & Ritland [15] interactive learning online is a learning system that is open and spread by using the pedagogy (educational tools), which is made possible through the Internet and network-based technology to facilitate the formation of learning and knowledge through action and interaction means.

Online interactive learning media can be defined as a medium that is equipped with a controller that can be operated by the user, so that the user can control and access to what the user needs, for example, to download the sources for the material entrepreneurship. The advantages of using an online interactive learning media is learning to be independent and high interactivity, able to increase the level of memory, providing more experiential learning, with text, audio, video and animation are all used to convey information, and also provides convenience deliver, update browse, download, students can also send an email to the other students, post comments on discussion forums, use chat rooms, video conferencing to link to communicate directly.

Definition of an online interactive learning media in this study is the use of Moodle E-Learning program containing entrepreneurial learning materials, which will be done online. Each student will be given the opportunity to be active in learning, either to ask or to access and download the materials from various sources over the internet. Students can also work on the problems that exist and can see the results of the questions that have been done, for every student get about randomly.

Offline interactive learning media can be defined as a medium that is not equipped with a controller/navigation that can be used by the user (the user). This medium run sequentially (in sequence). For example, the percentage of media that are generally not equipped with the tools to control what will be done by the user. The percentage of sequential runs as a straight line that can be called linear media and is typically used when the number of audience of more than one person, for example, can be realized in the form of a CD.

Some characteristics of interactive learning media offline by Dabbagh and Ritland [16] are: (1) an integrated learning materials, (2) learning time fixed/fixed time, (3) in the control by the lecturers/instructors, (4) learning unidirectional/linear, (5) the selected resources have been edited, (6) resources that have been fixed, (7) the technology used has been recognized.

To improve learning outcomes are better able to raise the necessary media readiness of students to observe or see what is presented by the lecturer in the learning process. In learning to use interactive media offline faculty can lead students to run the listening experience, see and focus on the material presented. And messages received by students can be a factor fictional, innovative and educative.

In principle; the use of interactive learning media offline in this study together with the use of online media, using Moodle E-Learning program. In the offline system, students get only source of lecturers and materials that already exist in the Moodle E-Learning program, students can't access or download through the internet. Students can actively ask only about the materials available, students can work on the problems that exist and can see the results, but for every student gets the same question, not assigned randomly.

Soyomukti [17], stated that interpersonal communication is "the process of sending and receiving messages between two persons, or Among a small group of persons, with some effects and some immediate feedback" (the process of sending and receiving messages between two people or among a small group of people with some effects and some instant feedback). From these definitions, interpersonal communication can take place between two people who meet each other, for example, between a student and lecturer. More effective interpersonal communication takes place when walking through dialogue, which is between two people who are delivering and giving messages on a reciprocal basis.

DeVito [18] suggests the effectiveness of interpersonal communication begins with five general quality are considered, namely transparency (openness), empathy, the attitude of support (supportiveness), a positive attitude, and equality.

By looking at some opinions on the above, it can be understood that interpersonal communication is a process of exchange of information, ideas, thoughts and feelings that take place between individuals in order to create a good relationship in social interaction. As an indicator of interpersonal communication in the study include: openness, empathy, being supportive, positive attitude and equality.

Formulation of the problem in this study were: (1) whether the results of the study group of students taught using an online interactive learning media is higher than the use of interactive learning media offline ?, (2) whether the group of students who have the ability to communicate openly acquire interpersonal learning outcomes Entrepreneurship higher compared with the group of students who have the ability to communicate interpersonal closed ?, and (3) whether there is an interaction between the use of interactive learning media and interpersonal communication in influencing entrepreneurial learning outcomes?

2. Materials and Methods

This study was conducted in the Department of Education Mechanical Engineering; Faculty of Engineering in the University of Medan on all students taking entrepreneurship courses consisting of three classes, each class consists of an average of 50 people, the overall population of 150 people. For a sampling technique in this study used a stratified random sample (cluster random sampling) through a lottery. Samples taken classes are Class X-2 and X-3 with a total sample of 100 people.

The method applied in this study is a quasi-experimental method. This method was chosen because the class that is used for treatment of fine grade class learning by using interactive learning media online and classroom learning using offline media interactive learning is a class that has been formed earlier and student characteristics are interpersonal communication.

The research design was a 2×2 factorial design. In this study, there are two factors that affect the learning outcomes of entrepreneurship that is learning by using interactive learning media and interpersonal communication students.

Data analysis techniques used for hypothesis testing is the analysis of variance (ANOVA) and two lines (two-way ANOVA). The use of this technique is intended to end the test results achieved by the research subject is really due to the influence of the treatment given in the research process with a significance level $\alpha = 0.05$. If the test results indicate the presence of interaction it is necessary to do further study. In the use of ANOVA two lines must meet the following requirements: (1) the data used to be normally distributed, so it is necessary to test for normality using Lilliefors test, (2) the data should have a homogeneous population variance, so the homogeneity of variance test was done using Fisher's exact test and test Bartlett.

3. Results and Discussion

3.1 Research Result

Hypothesis testing is done using the technique of analysis of variance (ANOVA). For purposes of analysis of variance, the necessary data can be seen in Table 1.

Table 1. Data Entrepreneurship Student Learning Outcomes

Interpersonal communication (B)	Interactive Learning Media				Total	
	Online (A ₁)		Offline (A ₂)			
Interpersonal Communication Open (B ₁)	n _{A1B1}	28	n _{A2B1}	26	n _t	54
	\overline{X}_{A1B1}	35.143	\overline{X}_{A2B1}	30.192	\overline{X}_t	32.648
	SD	2.438	SD	2.446	SD	3.406
	ΣX	981	ΣX	784	ΣX	1765
	ΣX ²	34525	ΣX ²	23776	ΣX ²	58301

	n_{A1B2}	22	n_{A2B2}	24	n_t	46
	\bar{X}_{A1B2}	29.318	\bar{X}_{A2B2}	32.583	\bar{X}_t	31.065
Interpersonal Communication Closed (B ₂)	SD	2.538	SD	2.535	SD	3.153
	ΣX	647	ΣX	782	ΣX	1429
	ΣX^2	19145	ΣX^2	25632	ΣX^2	44777
	n_t	50	n_t	50	n_{tot}	100
	\bar{X}	32.540	\bar{X}	31.340	\bar{X}_{Tot}	31.940
Total	SD	3.602	SD	2.853	SD	3.242
	ΣX	1628	ΣX	1566	ΣX	3194
	ΣX^2	53670	ΣX^2	49408	ΣX^2	103078

ANOVA calculation results are shown in Table 2 is a summary of a 2x2 factorial analysis.

Table 2. Summary of 2x2 Factorial Analysis

Sources of Variance	JK	Dk	RJK	F _{count}	F _{table}	Conclusion
Multimedia Learning	46.04	1	38.44	6.696	3.94	Significant
Interpersonal Communication	63.18	1	65.19	12.18	3.94	Significant
Interaction	394.52	1	398.51	69.38	3.94	Significant
Between groups	503.74	3	38.44			
In a group	559.5	96	5.83			
Total	1063.24	99				

Based on the summary in Table 2 will be detailed hypothesis testing as follows:

Testing the first hypothesis which states entrepreneurial learning outcomes of students who learned with interactive learning online media, higher than the student learning outcomes are taught with interactive learning media offline, statistical hypothesis is:

$$H_0 : \mu_{A1} = \mu_{A2} \quad H_a : \mu_{A1} > \mu_{A2}$$

The hypothesis statement is:

H_0 = Average of entrepreneurial learning outcomes of students who learned with using an online interactive learning media is less than or equal to the average of entrepreneurial learning outcomes of students who learned with interactive learning media offline

H_a = Students who learned with using an online interactive learning media to obtain the average higher entrepreneurial learning outcomes of the students who learned with interactive learning media offline

Based on the calculation 2x2 factorial ANOVA obtained while the value of F count = 6,696 Ftable = 3.94 for dk (1.96) and the real level $\alpha = 0.05$. It turns out that the value of F count = 6596 > F table = 3.94, hypothesis testing reject H_0 and accept H_a , thus conclude that entrepreneurial learning outcomes of students who learned with online interactive learning media is higher than the offline interactive learning media empirically verified. It is also evident from the average of the results of learning entrepreneurial learned with online interactive learning media ($\bar{X} = 35.143$) is higher than that learned entrepreneurial learning results with interactive learning media offline ($\bar{X} = 30.192$).

Testing the second hypothesis which states: entrepreneurial learning outcomes of students who have interpersonal communication open, higher than entrepreneurial learning outcomes of students who have closed interpersonal communication, statistical hypothesis is:

$$H_0 : \mu_{B1} = \mu_{B2} \quad H_a : \mu_{B1} > \mu_{B2}$$

The hypothesis statement is:

H_0 = Students with interpersonal communication open an average gain entrepreneurial learning outcomes is lower or equal to the students who have closed interpersonal communication

H_a = Students with interpersonal communication open obtain results learn entrepreneurship is higher than students who have closed interpersonal communication

Based on the calculation 2x2 factorial ANOVA obtained while the value of F count = 12:18 Ftable = 3.94 for dk (1.96) and the real level $\alpha = 0.05$. It turns out that the value of F count = 12:18 > F table = 3.94, hypothesis testing reject H_0 and accept H_a , thus conclude that entrepreneurial learning outcomes of students who have interpersonal communication open is higher than students who have closed interpersonal communication empirically verified. It is also evident from the average results of entrepreneurial learning interpersonal communication open ($\bar{X} = 32.648$) is higher than entrepreneurial learning outcomes of students who have closed interpersonal communication ($\bar{X} = 31.109$).

The third hypothesis testing, namely: there is interaction between the interactive learning media and interpersonal communication in improving learning outcomes of entrepreneurship.

$$H_0 : A \times B = 0 \quad H_a : A \times B \neq 0$$

The hypothesis statement is:

H_0 = There is no interaction between the interactive learning media and interpersonal communication on entrepreneurial learning outcomes of students.

H_a = There is interaction between the interactive learning media and interpersonal communication on entrepreneurial learning outcomes of students.

Based on the calculation 2x2 factorial ANOVA obtained while the value of $F_{\text{count}} = 69.38$ $F_{\text{table}} = 3.94$ for dk (1.96) and the real level $\alpha = 0.05$. It turns out that the value of $F_{\text{count}} = 69.38 > F_{\text{table}} = 3.94$, hypothesis testing reject H_0 and accept H_a , thus conclude that there is an interaction between the interactive learning media and interpersonal communication on entrepreneurship student learning outcomes, verified empirically.

For a comparison of the combination of the interaction between the interactive learning media and interpersonal communication on entrepreneurial learning outcomes, then tested further with the Scheffe test. The calculation for the Scheffe test. Summary results of Scheffe test calculations are presented in Table 3.

Table 3. Summary of Test Results of Scheffe

Hypothesis Statistics		F_{count}	$F_{\text{table}} (3.96)$ $\alpha = 0.05$
$H_0: \mu_{A1B1} = \mu_{A2B1}$	$H_a: \mu_{A1B1} > \mu_{A2B1}$	12.45	2.70
$H_0: \mu_{A1B1} = \mu_{A1B2}$	$H_a: \mu_{A1B1} > \mu_{A1B2}$	13.31	2.70
$H_0: \mu_{A1B1} = \mu_{A2B2}$	$H_a: \mu_{A1B1} > \mu_{A2B2}$	5.78	2.70
$H_0: \mu_{A2B1} = \mu_{A1B2}$	$H_a: \mu_{A2B1} < \mu_{A1B2}$	1.89	2.70
$H_0: \mu_{A2B2} = \mu_{A2B2}$	$H_a: \mu_{A2B1} > \mu_{A2B2}$	5.22	2.70
$H_0: \mu_{A2B1} = \mu_{A2B2}$	$H_a: \mu_{A2B2} > \mu_{A1B2}$	6.53	2.70

Based on Table 3 above are one of the six combinations in comparison showed significant results, this is caused by the absence of a significant difference between the average results of entrepreneurial learning in the cell. From the results of Scheffe test the above research concluded:

- (1) Average entrepreneurial learning outcomes of students who learned with interactive learning online media based interpersonal communication open is higher than the average of entrepreneurial learning outcomes of students who learned with offline media interactive learning based on interpersonal communication closed.
- (2) Average entrepreneurial learning outcomes of students who learned with interactive learning online media based interpersonal communication open is higher than the average of entrepreneurial learning outcomes of students with interactive learning online media based interpersonal communication closed.
- (3) Average entrepreneurial learning outcomes of students who learned with interactive learning online media based interpersonal communication open is higher than the average of entrepreneurial learning outcomes of students who learned with offline media interactive learning based on interpersonal communication closed.

(4) Average entrepreneurial learning outcomes of students who learned with interactive learning online media based interpersonal communication closed lower than the average of entrepreneurial learning outcomes of students who learned with offline media interactive learning based on interpersonal communication open.

(5) Average entrepreneurial learning outcomes of students who learned with offline media interactive learning based on interpersonal communication open is higher than the average of entrepreneurial learning outcomes of students who learned with offline media interactive learning based on interpersonal communication closed.

(6) Average entrepreneurial learning outcomes of students with interactive learning online media based interpersonal communication closed higher than the average of entrepreneurial learning outcomes of students with interactive learning media offline based interpersonal communication closed.

Further test results above, showing the interaction between the interactive learning media and interpersonal communication on entrepreneurial learning outcomes of students.

3.2 Discussion Research.

From the data processing research conducted, there are differences in entrepreneurial learning outcomes between students who learned with using online interactive media and students that learned by using interactive learning media offline averaging entrepreneurial learning outcomes of students who learned with using an online interactive learning media higher compared with students who learned with use of instructional media offline. It can be seen from the results of the average value of entrepreneurial students who were taught with interactive learning online media that is equal to 35.143, while the result of the average value of entrepreneurial students who were taught with interactive learning media offline for 30.192. From these data prove that the use of online media interactive learning better in improving the students' knowledge in entrepreneurial learning rather than the use of interactive learning media offline. This is reasonable, because the media interactive learning online is a learning system that is open and dispersed by using a pedagogy (educational tools), which is made possible through the Internet and network-based technology to facilitate the formation of learning and knowledge through action and interaction means [19].

The use of online interactive learning media in entrepreneurial learning allows students to interact directly and direct control on resources, so that students can control and access to what the needs, for example, to download the sources for the material in creating added value by combining resources through new and different ways to win the competition. The added value can be created by developing new technologies, discover new knowledge, find new ways to produce new goods and services more efficient, improve products and services, and find new ways to give satisfaction to the consumer. Learning with interactive media online also allows lecturers free to interact with the students so that learning is interactive which makes learning focused on the information that is being studied.

The foregoing is different from learning using offline media interactive learning, students do not interact directly on the source of information and learning is dominated by a lecturer who presents the information in a linear or one-way. This occurs because the offline media interactive learning students get only from faculty resources and materials that already exist in the Moodle E-Learning program, students can't access or download through the internet. Students can actively ask only about the materials that already exist. In summary it can be stated that the sources of information which is obtained only on the information that has been there before, compared with the use of interactive learning media online. Learning by using interactive media offline puts lecturers using active learning control, while the students are relatively passively accept and follow what the lecturer. Lecturer deliver structured materials with expectations given the subject matter can be controlled well by focusing on academic ability.

But the average data entrepreneurial learning outcomes of students who learned with interactive learning online media based interpersonal communication closed lower than the average of entrepreneurial learning outcomes of students who learned with offline media interactive learning based on interpersonal communication open, this happens maybe because there other factors such as the learning condition is not good, the lecturer who was assigned not fully understand the treatment, the conditions under which students are given the treatment and so on.

Although in general this study data showed that entrepreneurial learning outcomes of students is higher if learned with interactive learning online media than entrepreneurial learning outcomes of students who learned with interactive learning media offline. However, in practice both interactive learning media has been able to increase the understanding and entrepreneurial learning outcomes of students. It concluded that entrepreneurship learning outcomes of students who learned with using an online interactive learning media is higher than the entrepreneurial learning outcomes of students who learned with using interactive learning media offline.

From these results, it also shows that the average entrepreneurial learning outcomes of students who have higher interpersonal communication open than entrepreneurial learning outcomes of students who have closed interpersonal communication. This indicates that students who have open interpersonal communication are better able to understand the lessons of entrepreneurship compared with students who have closed interpersonal communication. This is reasonable, because students who have open interpersonal communication has the following characteristics: (1) transparency (openness), (2) empathy, (3) the attitude of support (supportive-ness), (4) positive attitude (positiveness) and (5) equality, while students who have otherwise closed interpersonal communication [20].

The results of this study support previous research conducted by Erlinawati [21] on the Influence of Learning and Interpersonal Communication Strategies Against PAI Learning Outcomes, found that the influence of interpersonal communication is very significant to the learning outcomes and found that students with high interpersonal communication has an average score of more higher than students who have low interpersonal communication.

The findings showed that there is an interaction between interactive learning media and interpersonal communication on entrepreneurial learning outcomes. Students who have interpersonal communication open learned with interactive learning online media acquire entrepreneurial learning outcomes are higher than students who have interpersonal communication open that learned by using interactive learning media offline. Similarly, students who have covered that learned interpersonal communication by using an online interactive learning media acquire entrepreneurial learning outcomes are lower than students who learned with using interactive learning media offline, although in this study there was no significant difference. This indicates that the interaction between the use of interactive learning media with interpersonal communication on entrepreneurial learning outcomes of students.

So for students who have interpersonal communication open will be motivated to study harder and be able to control themselves because they are always optimistic to be able to find out information about the purpose of the application of entrepreneurship in their daily lives and improve learning outcomes. While students who have closed interpersonal communication may feel worried and anxious when they are not able to follow lessons. This happens because the students with the characteristics of interpersonal communication is closed will be motivated and interested in the material that is presented by using the media or tools that are practical, simple and easy to do. One is the use of interactive media offline, students are required only able to relate the concepts so as to form a competency information in accordance with a predetermined basis.

4. Conclusion

Based on the research results and discussion presented earlier in this study it can be concluded that:

1. The use of online interactive learning media influence on entrepreneurial learning outcomes higher when compared with the use of interactive learning media offline.
2. Results of entrepreneurial students learn interpersonal communication open higher than entrepreneurial learning outcomes of students who have closed interpersonal communication.
3. There is an interaction between the use of interactive learning media and interpersonal communication in influencing student learning outcomes entrepreneurship. This is evident from the results of further tests which lead to the conclusion that the group of students who have interpersonal communication open obtain higher entrepreneurial learning outcomes if learned with using an online interactive learning media instead of using offline media interactive learning, while students who have closed higher interpersonal communication learning outcomes if learned with interactive learning media offline rather than using an online interactive learning media.

5. Implication

Based on the conclusions and findings of the research have proven that entrepreneurial learning outcomes of students who learned with online interactive learning media is higher than entrepreneurial learning outcomes of students who learned with interactive learning media offline, this can be taken into consideration for lecturers

entrepreneurship courses for the use of instructional media online interactive lessons, especially in entrepreneurship. Therefore, the research findings need to be considered and promoted the principal and the faculty who teach courses in entrepreneurship.

In the learning activities using an online interactive learning media are required to understand and observe the images, text, animation coordinated in an interactive application to be easily reproduced again when needed. With the existence of this medium, students who have interpersonal communication open can implement their own learning both on campus and at home and find themselves directly through the website information in accordance with the learning materials. Thus there will be gains in student cognitive structure and process of development of increasingly bold stance in seeking the latest information in the application of entrepreneurship in their daily lives and improve learning outcomes.

Likewise, the use of interactive learning offline media can be taken into consideration for faculty to student learning has closed interpersonal communication. In the presentation of interactive learning media offline linear, which allows for a faculty directing students in understanding the material presented is lecturer motivate students about entrepreneurship learning objectives. Students who have closed interpersonal communication is more likely to wait for information from a teacher without a direct initiative to find information or subject matter, thus the lecturers need to approach so that students can change their behavior, so the acquisition of study results at least equal to the learning outcomes that have interpersonal communication open.

The third conclusion Results show that students who have interpersonal communication open acquire entrepreneurial learning outcomes are higher when using the media learned with interactive learning online. Similarly entrepreneurial learning outcomes of students who have closed interpersonal communication will be higher when learned with using interactive learning media offline. The use of interactive learning media in accordance with the characteristics of the students will be more meaningful learning activities, so that learning will be more effective, efficient and has appeal. But be aware that no one interactive learning media most appropriate for each student characteristics and learning characteristics. But the results of this study can be input for a lecturer in entrepreneurship to select the appropriate interactive learning media in presenting learning material.

6. Suggestion

Based on the results and findings have been described in the conclusions and implications of the research results, it is suggested some of the following:

1. To give a lecturer in the course; the teacher should use an online interactive learning media, instead of using interactive learning media offline. It is based on the results of studies that use an online interactive learning media influence on learning outcomes are higher when compared with the use of interactive learning media offline.
2. Teachers should pay attention to interpersonal communication owned by the student. By grouping students based group interpersonal communication open and closed, then the teacher can differentiate in

delivering lectures using interactive learning media that is using an online interactive learning media for student groups have open communication and offline interactive learning media for students who have closed interpersonal communication.

3. For further research on the use of interactive learning media in addition to faculty who become research partners, need to be socialized prior to the students how the media use of interactive learning procedure so that the use of time can be as efficient as possible and learning effectiveness can be achieved.

4. Researchers who studied the use of interactive learning media are advised to use interactive learning media that has the same eligibility quality between the two interactive media as compared to the results more accurate.

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